

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A communication system which sets a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time in the same period in accordance with the transmission path, characterized in that,

bits are assigned in such a manner that the data ~~for~~ assigned to one period can be correspond to one or more symbols, the one or more symbols are transmitted during the data transmission time of that period, and the data are distributed uniformly over the data transmission time of the period.

2. (Currently Amended) A communication system which sets a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time in the same period in accordance with the transmission path, characterized in that,

bits are assigned in such a manner that the data ~~for~~

assigned to one period can be correspond to one or more symbols,
the one or more symbols are transmitted during the data
transmission time and the quasi-data transmission time of that
period, and the data are distributed uniformly over each of the
data transmission time and the quasi-data transmission time of
the period.

3. (Original) A communication system which sets a data
transmission time which is the time suitable for data
transmission in a period and a quasi-data transmission time which
is the time other than the data transmission time in the same
period in accordance with the transmission path and transmits a
first and a second data by multiplexing, characterized in that,

bits are assigned in such a manner that, the first data for
one period can be transmitted during the data transmission time
of that period and the first data are distributed uniformly over
the data transmission time of the period, and the second data of
a predetermined period can be transmitted in the portion of the
data transmission time of the predetermined period where the
first data have not been assigned.

4. (Original) A communication system which sets a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time in the same period in accordance with the transmission path and transmits a first and a second data by multiplexing, characterized in that,

bits are assigned in such a manner that, the first data for one period can be transmitted during the data transmission time and the quasi-data transmission time of that period and the first data are distributed uniformly over each of the data transmission time and the quasi-data transmission time of the period, and the second data of a predetermined period can be transmitted in the portion of the data transmission time and the quasi-data transmission time of the predetermined period where the first data have not been assigned.

5. (Currently Amended) A communication system which sets a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time in the same period in accordance with the transmission path, characterized in that,

bits are assigned in such a manner that the data for

assigned to one period can be correspond to one or more symbols,
the one or more symbols are transmitted during the data
transmission time of that period, ~~and~~ the data are distributed
uniformly over the data transmission time of the period, the data
transmitted in this manner is received, and all of the one or
more symbols of the data for assigned to that period are
reproduced based on the portion of the received data assigned to
the data transmission time of the same period.

6. (Currently Amended) A communication system which sets a data
transmission time which is the time suitable for data
transmission in a period and a quasi-data transmission time which
is the time other than the data transmission time in the same
period in accordance with the transmission path, characterized in
that,

bits are assigned in such a manner that the data ~~for~~
assigned to one period can be correspond to one or more symbols,
the one or more symbols are transmitted during the data
transmission time and the quasi-data transmission time of that
period, ~~and~~ the data are distributed uniformly over each of the
data transmission time and the quasi-data transmission time of
the period, the data transmitted in this manner is received, and
all of the one or more symbols of the data for assigned to that

period are reproduced based on the portion of the received data assigned to the data transmission time and the quasi-data transmission time of the same period.

7. (Original) A communication system which sets a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time in the same period in accordance with the transmission path and transmits a first and a second data by multiplexing, characterized in that,

bits are assigned so that the first data for one period can be transmitted during the data transmission time of the particular period and the first data are distributed uniformly over the data transmission time of the period, so that the second data of a predetermined period can be transmitted in the portion of the data transmission time of the predetermined period where the first data have not been assigned, and so that the data so assigned and transmitted are received and all the first data of one period are reproduced based on the portion of the received first data assigned to the data transmission time for the period, and wherein all the second data of a predetermined period are reproduced based on the received second data assigned to the data transmission time of the predetermined period.

8. (Original) A communication system which sets a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time in the same period in accordance with the transmission path and transmits a first and a second data by multiplexing, characterized in that,

bits are assigned in such a manner that the first data for one period can be transmitted during the data transmission time and the quasi-transmission time of that period and the first data are distributed uniformly over each of the data transmission time and the quasi-data transmission time of that period, and the second data of a predetermined period can be transmitted in the portion of the data transmission time and the quasi-data transmission time of the predetermined period where the first data have not been assigned, wherein the data so assigned and transmitted are received, and all the first data of one period are reproduced based on the portion of the received first data assigned to the data transmission time and the quasi-data transmission time, while all the second data of a predetermined period are reproduced based on the portion of the received second data assigned to the data transmission time and the quasi-data transmission time of the predetermined period.

9. (Currently Amended) A communication method in which a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time is set in the same period in accordance with the transmission path, characterized in that,

bits are assigned in such a manner that the data ~~for~~
assigned to one period can be correspond to one or more symbols,
the one or more symbols are transmitted during the data
transmission time of that period, and the data are distributed
uniformly over the data transmission time of the period.

10. (Currently Amended) A communication method in which a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time is set in the same period in accordance with the transmission path, characterized in that,

bits are assigned in such a manner that the data ~~for~~
assigned to one period can be correspond to one or more symbols,
the one or more symbols are transmitted during the data
transmission time and the quasi-data transmission time of that

period, and the data are distributed uniformly over each of the data transmission time and the quasi-data transmission time of the period.

11. (Currently Amended) A communication ~~system~~method in which a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time in the same period is set in accordance with the transmission path and transmits a first and a second data by multiplexing, characterized in that,

bits are assigned in such a manner that, the first data for one period can be transmitted during the data transmission time of that period and the first data are distributed uniformly over the data transmission time of the period, and the second data of a predetermined period can be transmitted in the portion of the data transmission time of the predetermined period where the first data have not been assigned.

12. (Currently Amended) A communication ~~system~~method in which a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time in the same

period is set in accordance with the transmission path and transmits a first and a second data by multiplexing, characterized in that,

bits are assigned in such a manner that, the first data for one period can be transmitted during the data transmission time and the quasi-data transmission time of that period and the first data are distributed uniformly over each of the data transmission time and the quasi-data transmission time of the period, and the second data of a predetermined period can be transmitted in the portion of the data transmission time and the quasi-data transmission time of the predetermined period where the first data have not been assigned.

13. (Currently Amended) A communication method in which a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time is set in the same period in accordance with the transmission path, characterized in that,

bits are assigned in such a manner that the data ~~for~~ assigned to one period can be correspond to one or more symbols, the one or more symbols are transmitted during the data transmission time of that period, ~~and~~ the data are distributed

uniformly over the data transmission time of the period, the data transmitted in this manner is received, and all of the one or more symbols of the data ~~for~~ assigned to that period are reproduced based on the portion of the received data assigned to the data transmission time of the same period.

14. (Currently Amended) A communication method in which a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time is set in the same period in accordance with the transmission path, characterized in that,

bits are assigned in such a manner that the data ~~for~~ assigned to one period ~~can be~~ correspond to one or more symbols, the one or more symbols are transmitted during the data transmission time and the quasi-data transmission time of that period, ~~and~~ the data are distributed uniformly over each of the data transmission time and the quasi-data transmission time of the period, the data transmitted in this manner is received, and all of the one or more symbols of the data ~~for~~ assigned to that period are reproduced based on the portion of the received data assigned to the data transmission time and the quasi-data transmission time of the same period.

15. (Currently Amended) A communication ~~system~~ method in which a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time in the same period is set in accordance with the transmission path and transmits a first and a second data by multiplexing, characterized in that,

bits are assigned so that the first data for one period can be transmitted during the data transmission time of the particular period and the first data are distributed uniformly over the data transmission time of the period, so that the second data of a predetermined period can be transmitted in the portion of the data transmission time of the predetermined period where the first data have not been assigned, and so that the data so assigned and transmitted are received and all the first data of one period are reproduced based on the portion of the received first data assigned to the data transmission time for the period, and wherein all the second data of a predetermined period are reproduced based on the received second data assigned to the data transmission time of the predetermined period.

16. (Currently Amended) A communication ~~system~~method in which a data transmission time which is the time suitable for data transmission in a period and a quasi-data transmission time which is the time other than the data transmission time in the same period is set in accordance with the transmission path and transmits a first and a second data by multiplexing, characterized in that,

bits are assigned in such a manner that the first data for one period can be transmitted during the data transmission time and the quasi-transmission time of that period and the first data are distributed uniformly over each of the data transmission time and the quasi-data transmission time of that period, and the second data of a predetermined period can be transmitted in the portion of the data transmission time and the quasi-data transmission time of the predetermined period where the first data have not been assigned, wherein the data so assigned and transmitted are received, and all the first data of one period are reproduced based on the portion of the received first data assigned to the data transmission time and the quasi-data transmission time, while all the second data of a predetermined period are reproduced based on the portion of the received second data assigned to the data transmission time and the quasi-data transmission time of the predetermined period.

17. (New) A transmission device in a communication system, which sets a first and second transmission time for each period, the device being configured to:

assign one or more data symbols to a period;

assign bits of the one or more data symbols for data transmission, such that all of the assigned bits are transmitted during the period, and the bits are uniformly assigned over at least one of the first and second transmission times.

18. (New) The device according to claim 17, wherein the device is configured to:

assign the bits to the period, such that all of the bits are transmitted during the first transmission time of the period.

19. (New) The device according to claim 18, wherein the first transmission time corresponds to far-end crosstalk time generated in a transmission data path.

20. (New) The device according to claim 18, wherein

the one or more data symbols includes at least one symbol of a first data and at least one symbol of a second data, and

the device is configured to assign the bits such that the at least one symbol of the first data is transmitted during the first transmission time, and the at least one symbol of the second data is transmitted during a portion of the first transmission time not assigned to the at least one symbol of the first data.

21. (New) The device according to claim 17, wherein the device is configured to:

assign the bits to the period, such that all of the bits are transmitted during the first and second transmission times, one portion of the assigned bits being uniformly distributed over the first transmission time, and the other portion of the assigned bits being uniformly distributed over the second transmission time.

22. (New) The device according to claim 21, wherein

the first transmission time corresponds to far-end crosstalk time generated in a data transmission path and the second transmission time corresponds to near-end crosstalk time generated in the data transmission path.

23. (New) The device according to claim 21, wherein

the one or more data symbols includes at least one symbol of a first data and at least one symbol of a second data, and

the device is configured to assign the bits such that the at least one symbol of the first data is transmitted during the first and second transmission times, and the at least one symbol of the second data is transmitted during a portion of the first and second transmission times not assigned to the at least one symbol of the first data.

24. (New) A method of transmitting data, comprising:

setting a first and second transmission time for a period;

assigning one or more data symbols to the period;

assigning bits of the one or more data symbols for data transmission, such that all of the bits of the one or more data symbols are transmitted during the period, and the bits are

uniformly assigned over at least one of the first and second transmission times.

25. (New) The method according to claim 24, further comprising:

assigning the bits to the period, such that all of the bits are transmitted during the first transmission time of the period.

26. (New) The method according to claim 25, wherein the first transmission time corresponds to far-end crosstalk time generated in a transmission data path.

27. (New) The method according to claim 25, wherein

the one or more data symbols includes at least one symbol of a first data and at least one symbol of a second data, and

the bits are assigned, such that the at least one symbol of the first data is transmitted during the first transmission time, and the at least one symbol of the second data is transmitted during a portion of the first transmission time not assigned to the at least one symbol of the first data.

28. (New) The method according to claim 24, wherein the device is configured to:

assign the bits to the period, such that all of the bits are transmitted during the first and second transmission times, one portion of the assigned bits being uniformly distributed over the first transmission time, and the other portion of the assigned bits being uniformly distributed over the second transmission time.

29. (New) The method according to claim 28, wherein

the first transmission time corresponds to far-end crosstalk time generated in a data transmission path and the second transmission time corresponds to near-end crosstalk time generated in the data transmission path.

30. (New) The method according to claim 28, wherein

the one or more data symbols includes at least one symbol of a first data and at least one symbol of a second data, and

the bits are assigned, such that the at least one symbol of the first data is transmitted during the first and second transmission times, and the at least one symbol of the second data is transmitted during a portion of the first and second

transmission times not assigned to the at least one symbol of
the first data.